

# BookletChart™

## Havana to Tampa Bay

NOAA Chart 4148

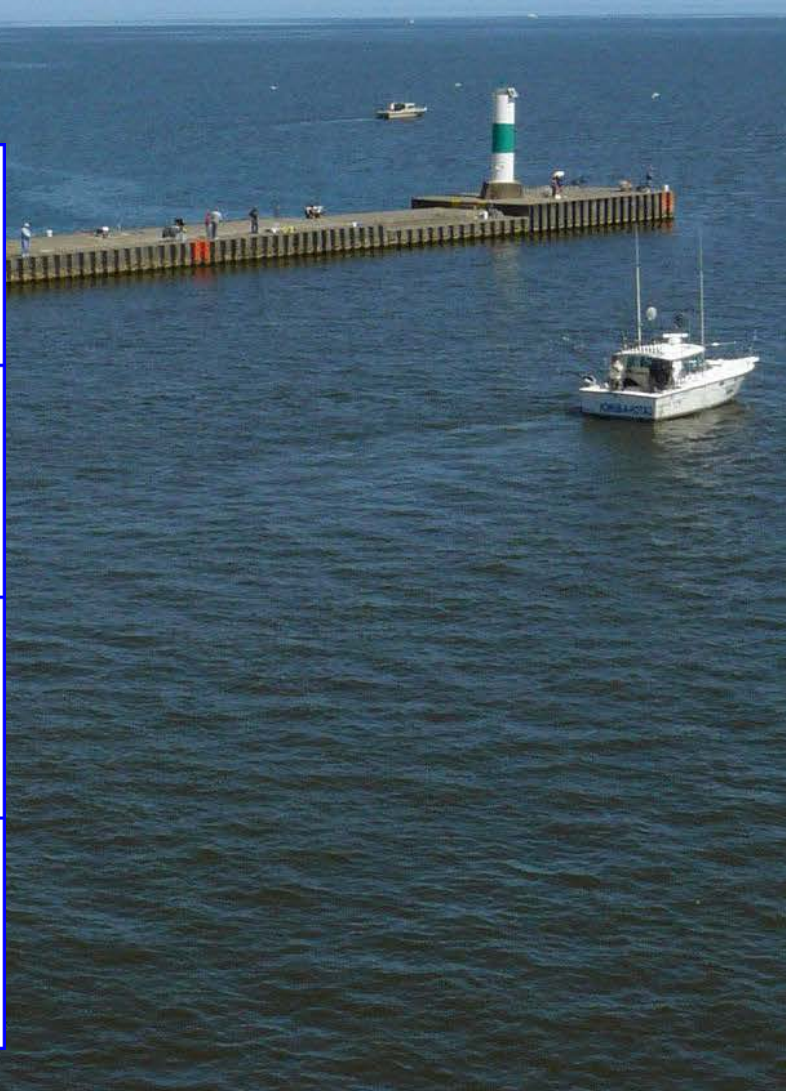
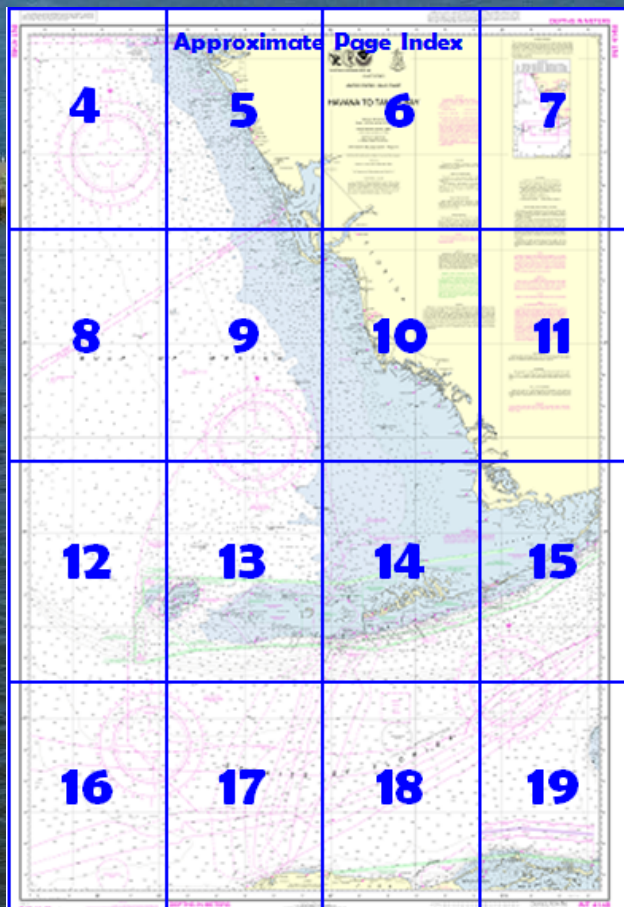


*A reduced-scale NOAA nautical chart for small boaters*

*When possible, use the full-size NOAA chart for navigation.*



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



**Published by the**  
**National Oceanic and Atmospheric Administration**  
**National Ocean Service**  
**Office of Coast Survey**  
[www.NauticalCharts.NOAA.gov](http://www.NauticalCharts.NOAA.gov)  
**888-990-NOAA**

### What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

### What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

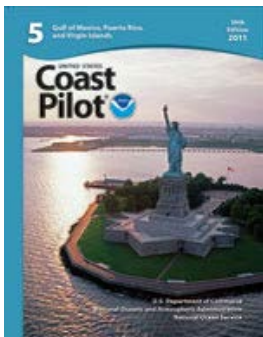
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

### Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at [http://www.nauticalcharts.noaa.gov/nsd/coastpilot\\_w.php?book=5](http://www.nauticalcharts.noaa.gov/nsd/coastpilot_w.php?book=5).



### (Selected Excerpts from Coast Pilot)

The coast, for nearly 115 miles, from Key West to San Carlos Bay is low, sandy, and generally wooded. Innumerable small islands and keys, interlaced by many small rivers and bayous, make up Everglades National Park and the Ten Thousand Islands. From San Carlos Bay N to Tampa Bay the coast is made up of nearly straight sandy beaches of the barrier islands.

The Florida Keys comprise a chain of low islands along the SW coast of the Florida

Peninsula extending W in a wide arc to the Dry Tortugas. The keys are mostly of coral formation and are generally covered with dense mangrove, though some have stands of pine and a few have coconut groves. **Florida Keys National Marine Sanctuary**, a Marine Protected

Area (MPA), surrounds the keys from Biscayne Bay to Dry Tortugas. On the straits side of the keys, and at an average distance of 5 miles, are the Florida Reefs, a dangerous line of shoals which extend along the entire length of the chain. The reefs are particularly hazardous because they do not break in smooth weather and few of them are exposed. The water shoals abruptly between the reefs and along their outer edges. When approaching the reefs from seaward, their proximity usually is indicated by a change in color of the water from deep blue to light green or by the bank blink, described in chapter 3. However, too much reliance should not be placed on such indications. Lights and daybeacons facilitate navigation along the reefs in clear weather, but soundings should be resorted to in thick weather. Depths of 50 fathoms indicate a distance of 2 to 3 miles from the reefs, and great caution should be used in approaching closer. Fogs are infrequent in this area.

The water always becomes milky following windy weather. The usual color is bluish green on the reefs, while the rock patches are dark, shading through brown to yellow as they approach the surface. Sand patches are bright green. Grass patches at depths of 10 to 15 feet have the appearance of rocks. With the sun astern, the line marking deep water and the edges of reefs is surprisingly clear from a position aloft. The Florida Keys Particularly Sensitive Sea Area (PSSA) is an IMO-designated zone that encircles the sea area around all of the Florida Keys. The PSSA includes the entire Florida Keys National Marine Sanctuary as well as Biscayne National Park at the northeastern end of the keys. The PSSA has been established to protect the exceptional values of the sea area around the Florida Keys from possible damage by international shipping activities. The PSSA includes the Tortugas Ecological Reserve, which was established in 2001 to protect nearly pristine coral formations and habitat in the Sanctuary. The coral resources within the Reserve are especially vulnerable to possible damage from shipping activities.

**Weather.**—Along the coast from Key West to Tampa Bay, the major weather hazards include tropical cyclones, thunderstorms, and cold fronts. Tropical cyclones, which can occur in any month, are mainly a threat in June, August, September, and October. Seventeen tropical cyclones have approached the coastline between Key West and Tampa Bay since 1950. The chance of a tropical cyclone encounter decreases along the W coast, N to Fort Myers and Tampa Bay. Thunderstorms develop on about 60 to 80 days annually along this section of the coast. They are least likely near Key West and most likely in the Tampa Bay area. While they can occur at anytime, they are most likely from June through September, during the late afternoon and evening hours; at sea they frequently occur at night. During the summer months, thunderstorms are observed on about 10 to 20 days per month. From fall through spring, cold fronts occasionally reach these waters generating strong, gusty winds which kick up rough seas. While gales are infrequent, winds of 28 knots or more occur about 1 to 2 percent of the time off Key West and 2 to 3 percent of the time off Fort Myers. Wave heights of 10 feet or more are encountered 1 to 3 percent of the time in the S compared to 3 to 5 percent off Fort Myers. Visibilities are usually good, particularly off Key West. Farther N, they drop below 2 miles about 1 percent of the time from December through April. Along the coast, a shallow ground fog may form, but this usually dissipates with the rising sun.

### U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC New Orleans

Commander

8th CG District

New Orleans, LA

(504) 589-6225

# Navigation Managers Area of Responsibility



**NOAA's navigation managers** serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit [nauticalcharts.noaa.gov/service/navmanagers](http://nauticalcharts.noaa.gov/service/navmanagers)

To make suggestions or ask questions online, go to [nauticalcharts.noaa.gov/inquiry](http://nauticalcharts.noaa.gov/inquiry).

To report a chart discrepancy, please use [ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx](http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx).

## Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers

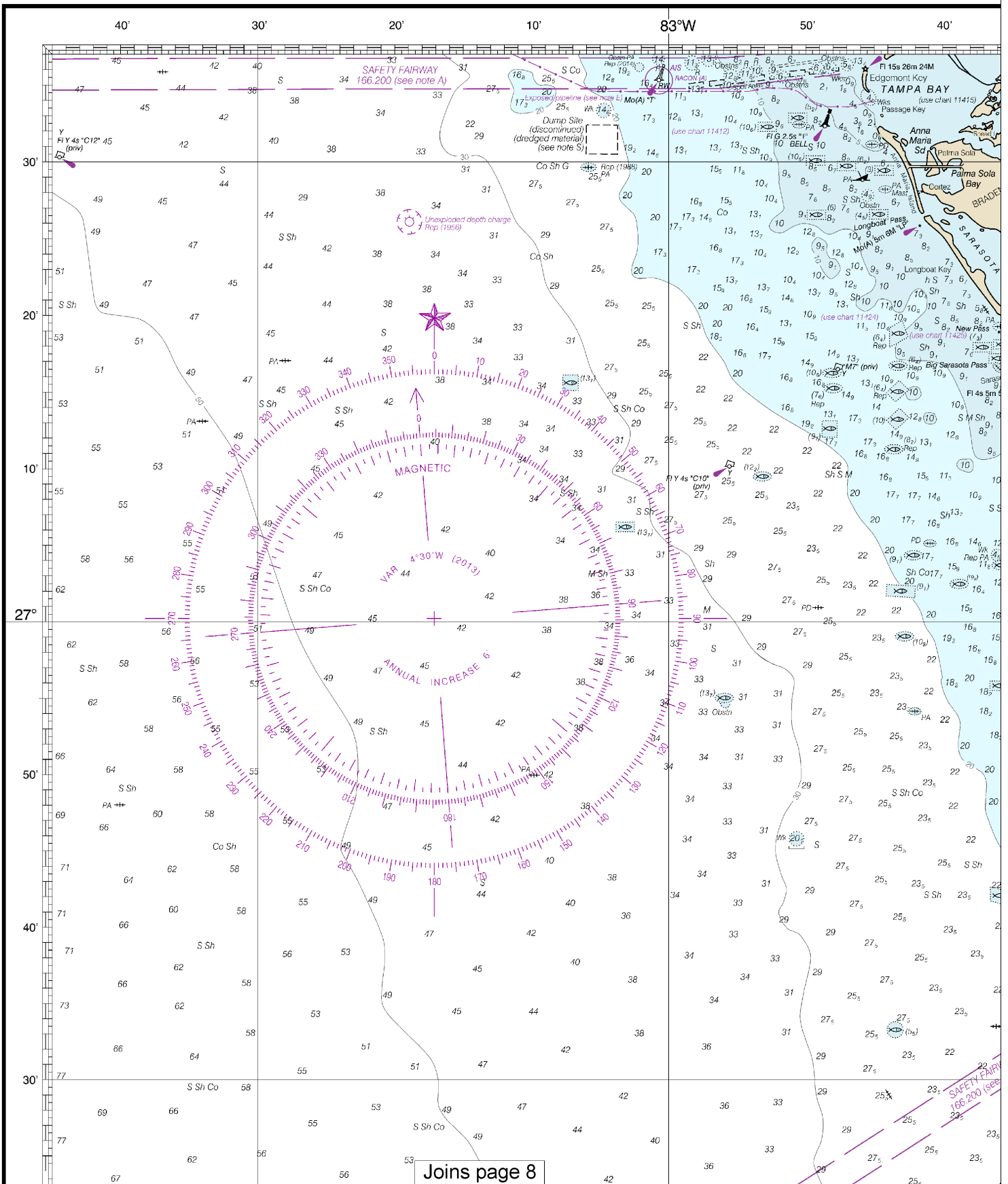


For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

These volumes are available online at <http://www.navcen.uscg.gov>



INT 4148



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Note: Chart grid lines are aligned with true north.



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - GULF COAST

Mercator Projection  
Scale 1:470,940 at Lat 25°30'N

World Geodetic System 1984  
(North American Datum of 1983)

DEPTHS IN METERS  
AT MEAN LOWER LOW WATER

IALA Maritime Buoyage System - Region B

Additional information can be obtained at [nauticalcharts.noaa.gov](http://nauticalcharts.noaa.gov)

HEIGHTS  
Heights in meters above Mean High Water.

For Symbols and Abbreviations see Chart No. 1

## HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

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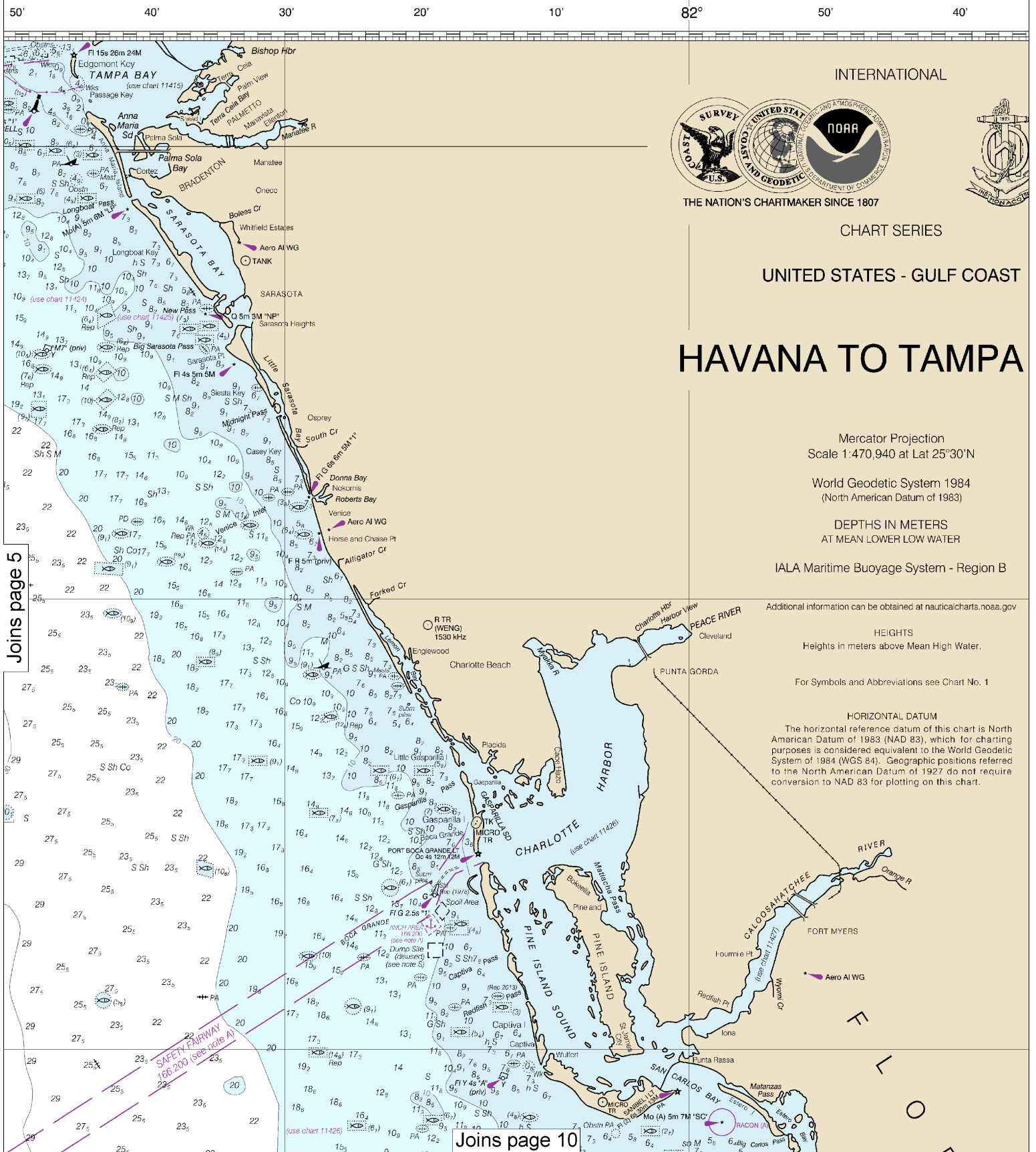
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**CAUTION**  
SUBMARINE PIPELINES AND CABLES  
Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

**CAUTION**  
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

**AIDS TO NAVIGATION**  
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

See National Geospatial-Intelligence Agency List of Lights and Fog Signals for information not included in the U.S. Coast Guard Light List.

**RADAR REFLECTORS**  
Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

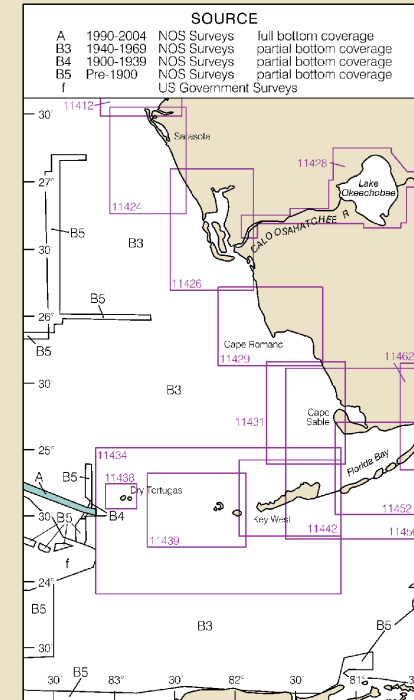
**RACING BUOYS**  
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

**NOTE**  
The Traffic Separation Scheme on this chart is approved by the International Maritime Organization (IMO).

**NOTE S**  
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

Joins page 11

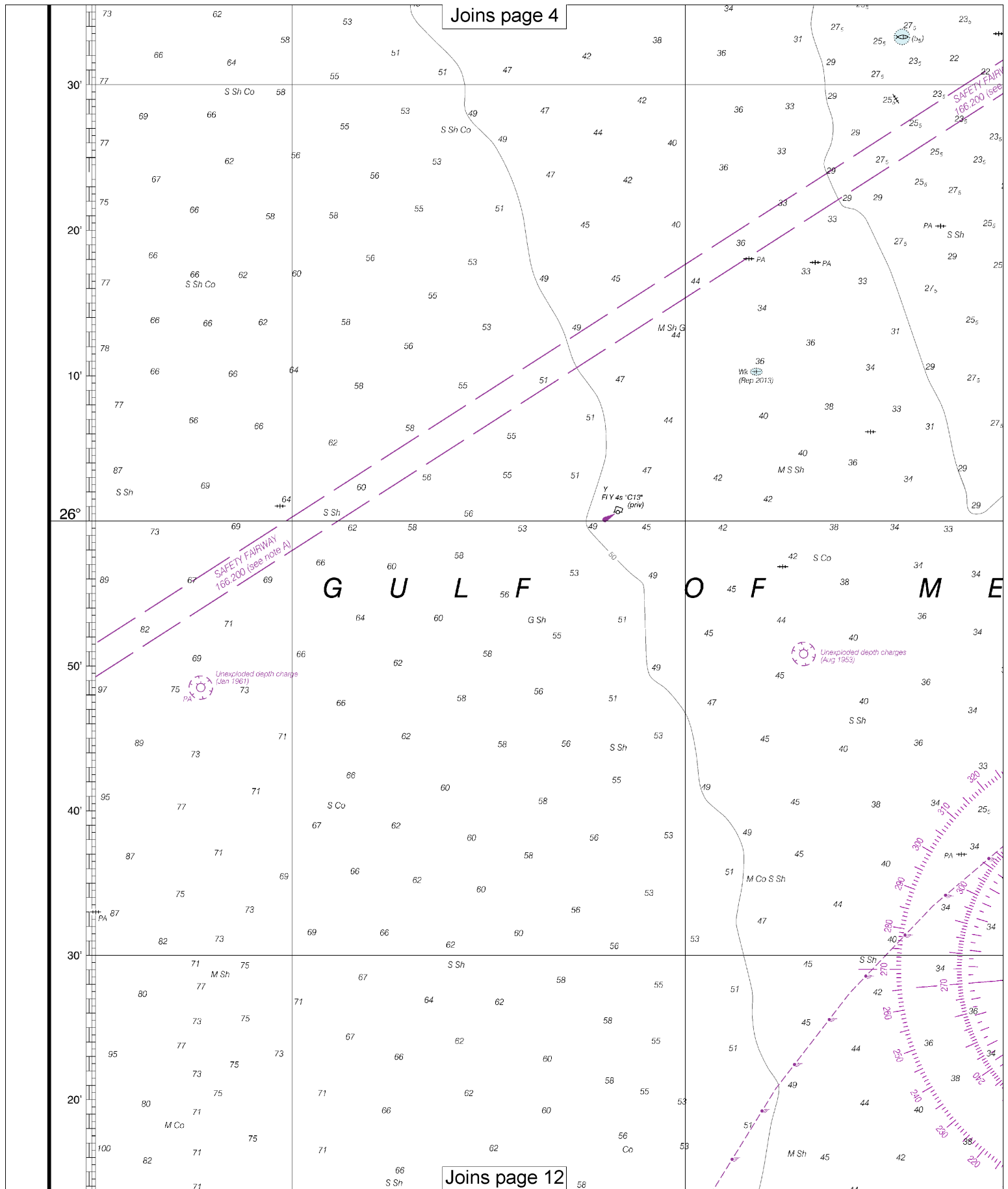
**SOURCE DIAGRAM**  
The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Consult larger scale charts for survey information in areas outlined in magenta. Refer to Chapter 1, United States Coast Pilot.



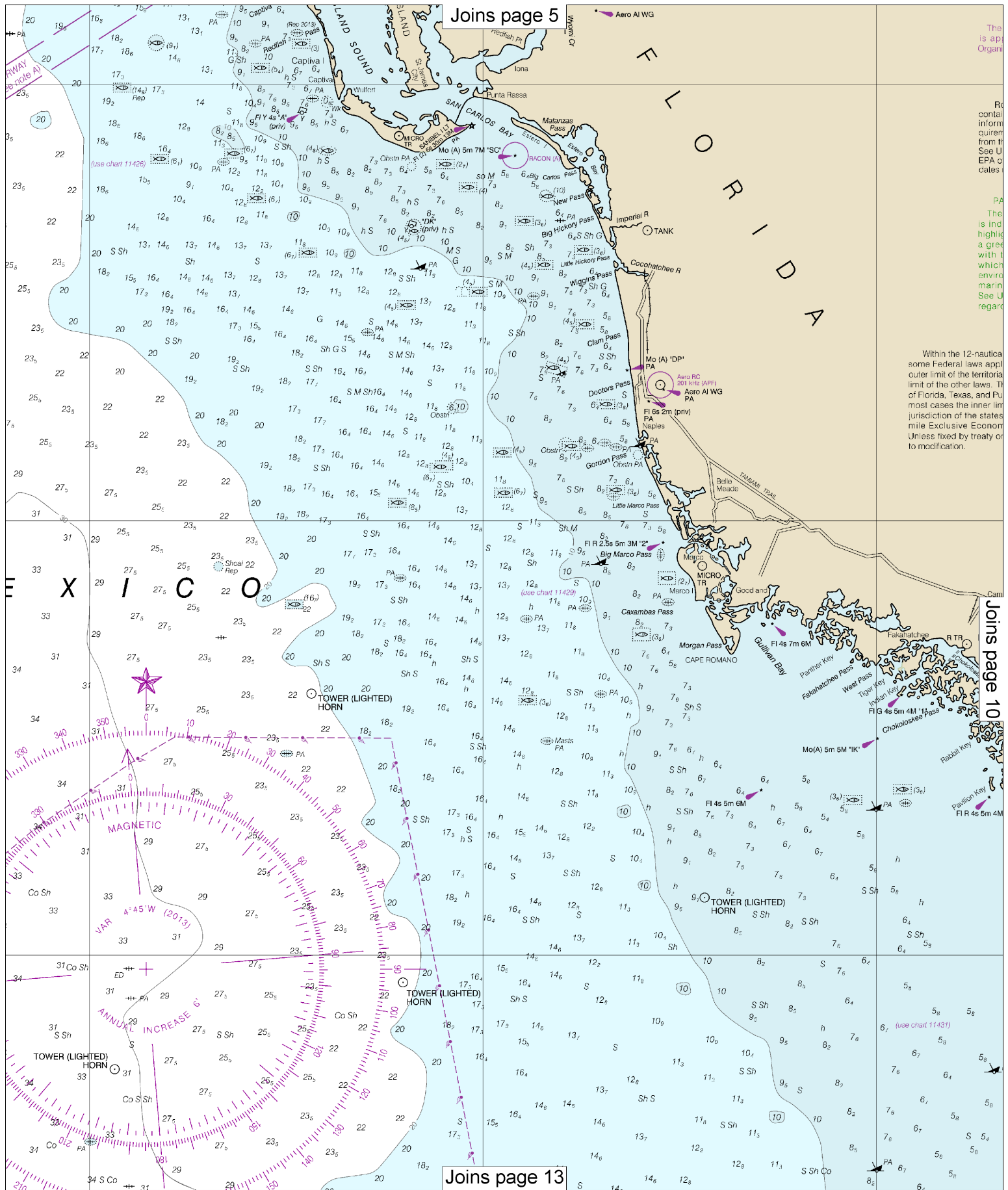
**CAUTION**  
Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.  
Station positions are shown thus:  
⊙ (Accurate location)    ⊙ (Approximate location)

**HURRICANES AND TROPICAL STORMS**  
Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations.  
Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved.  
Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

**NOTE A**  
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 4 and 5. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 7th Coast Guard District in Miami, Florida, or at the Office of the Engineer, Corps of Engineers in Jacksonville.







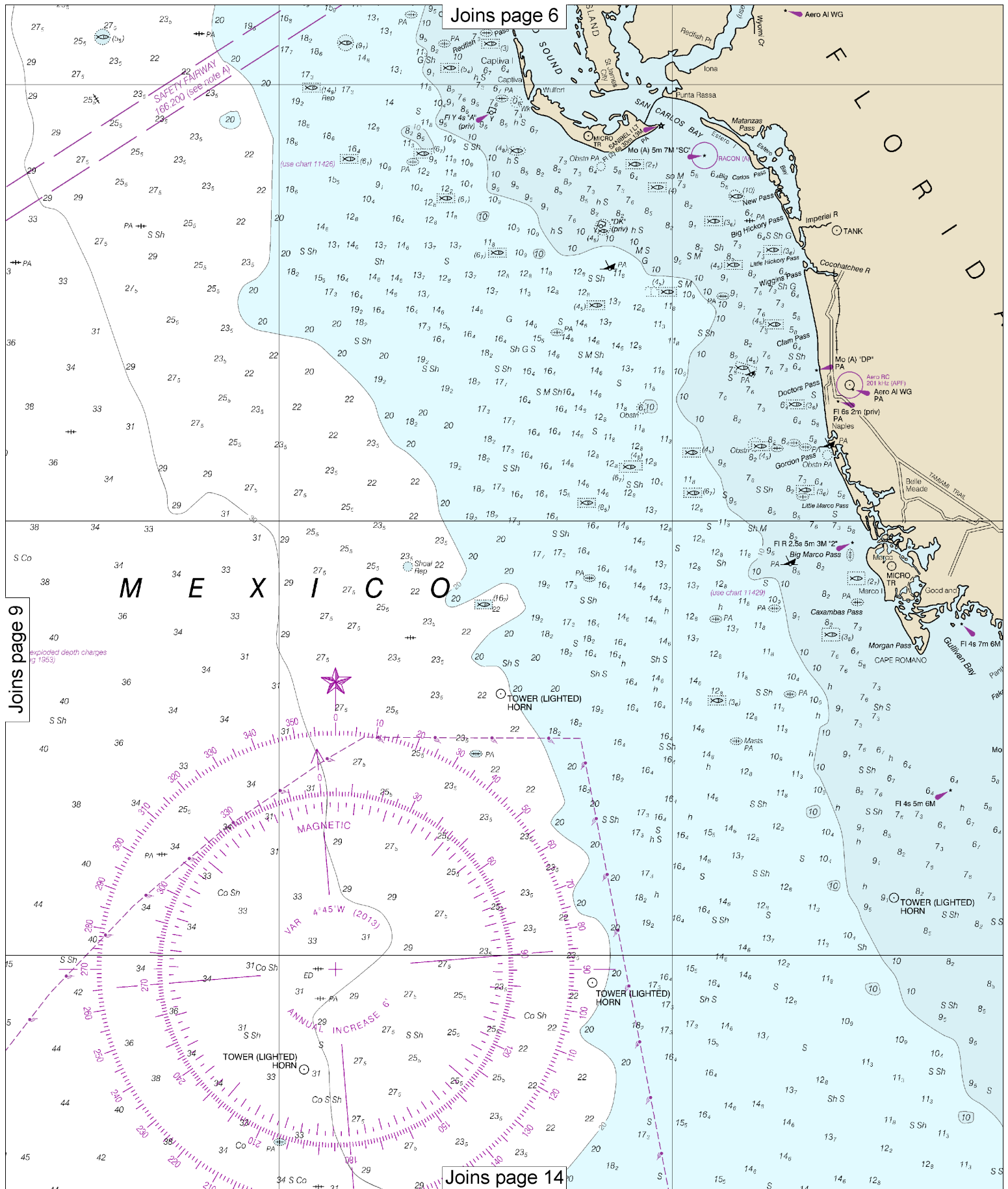
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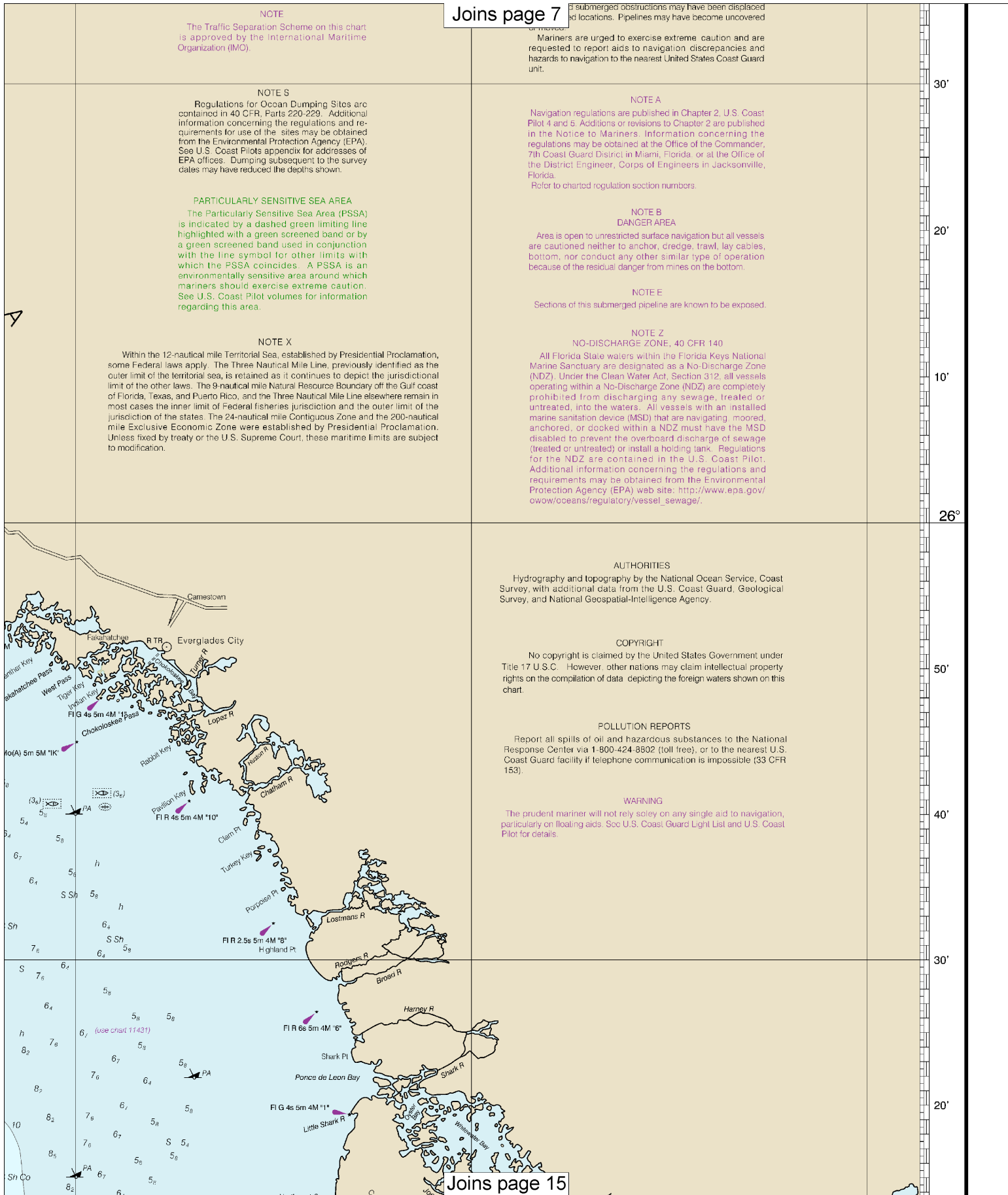
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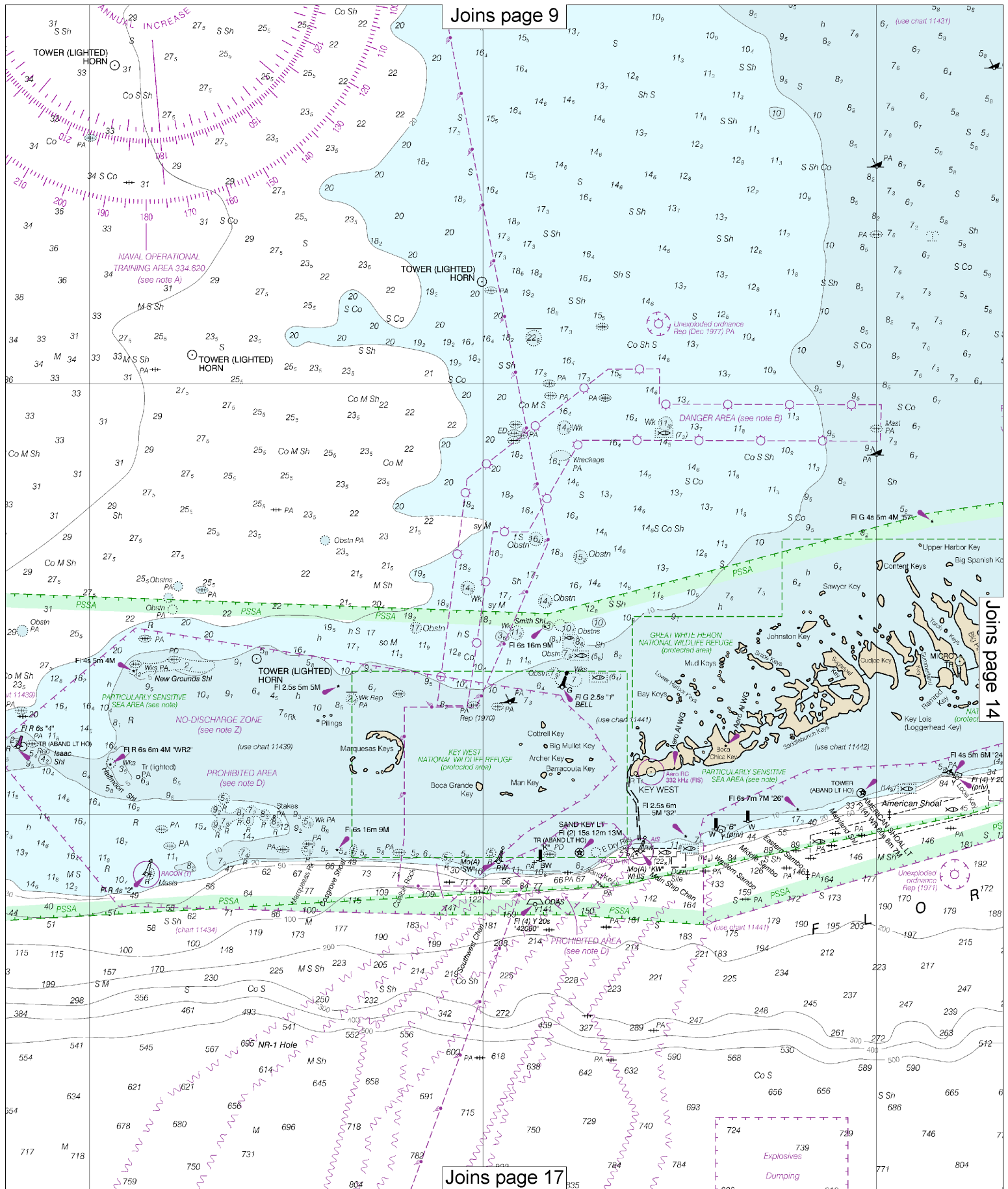
Note: Chart grid lines are aligned with true north.

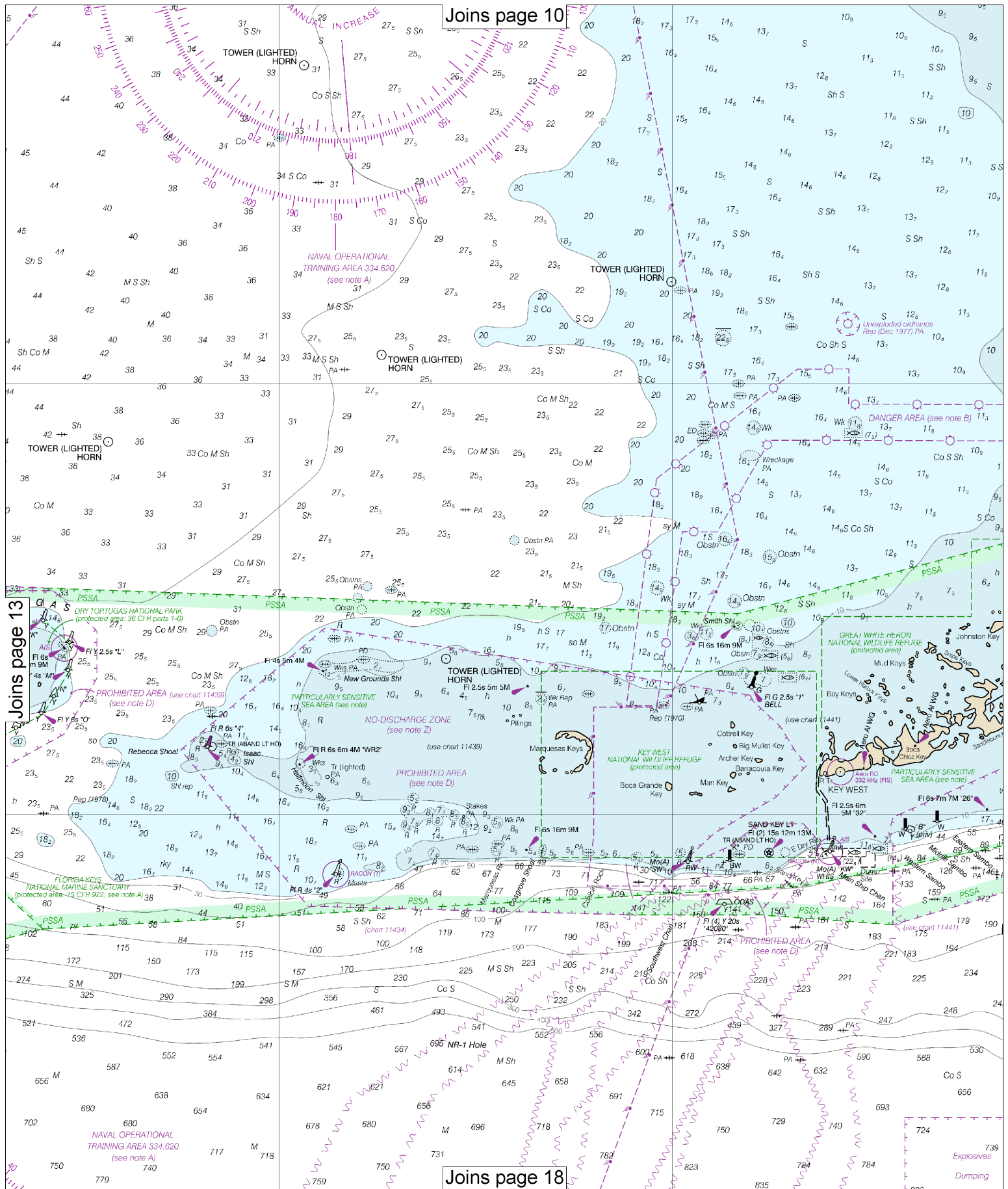




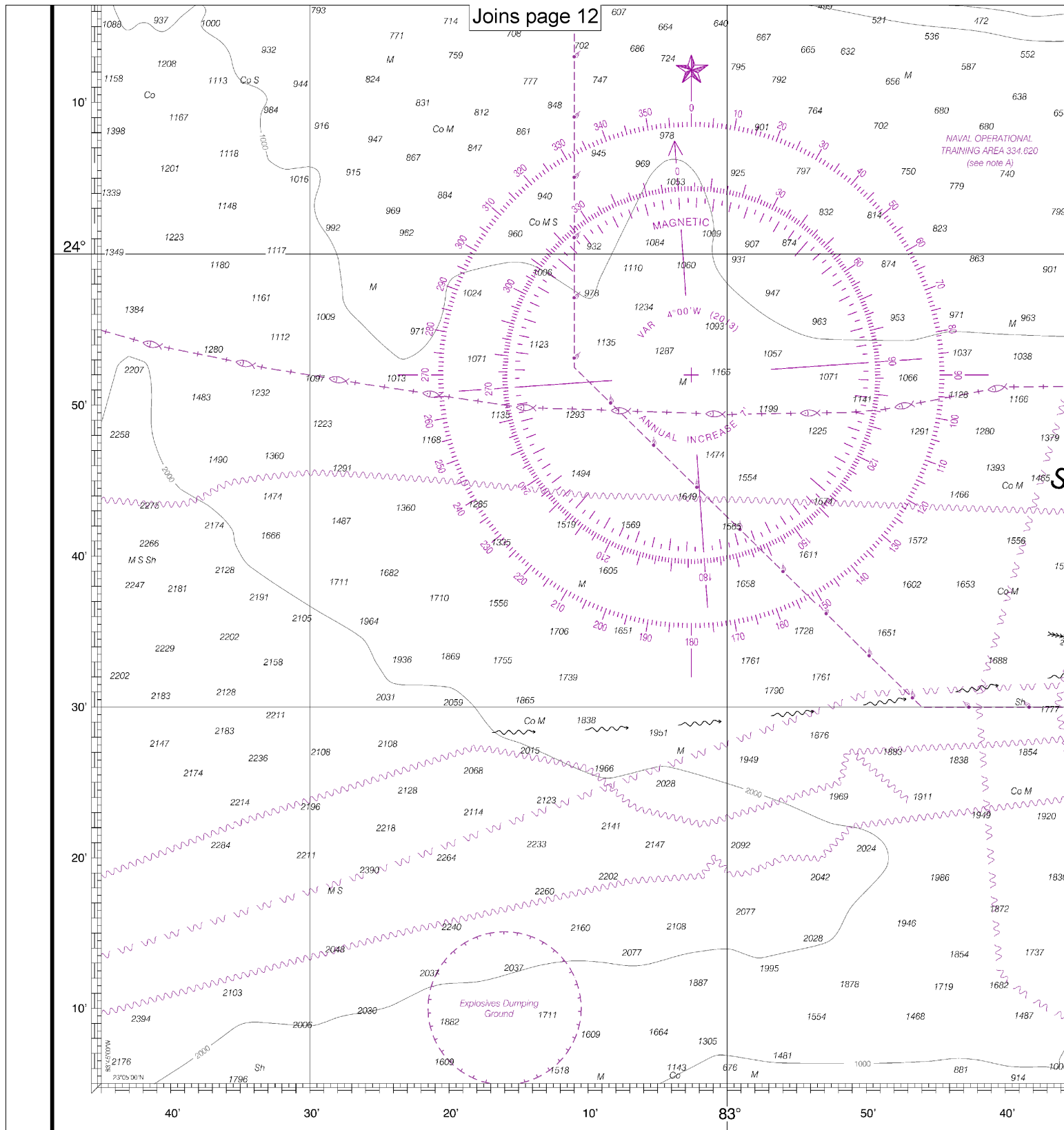
Note: Chart grid lines are aligned with true north.



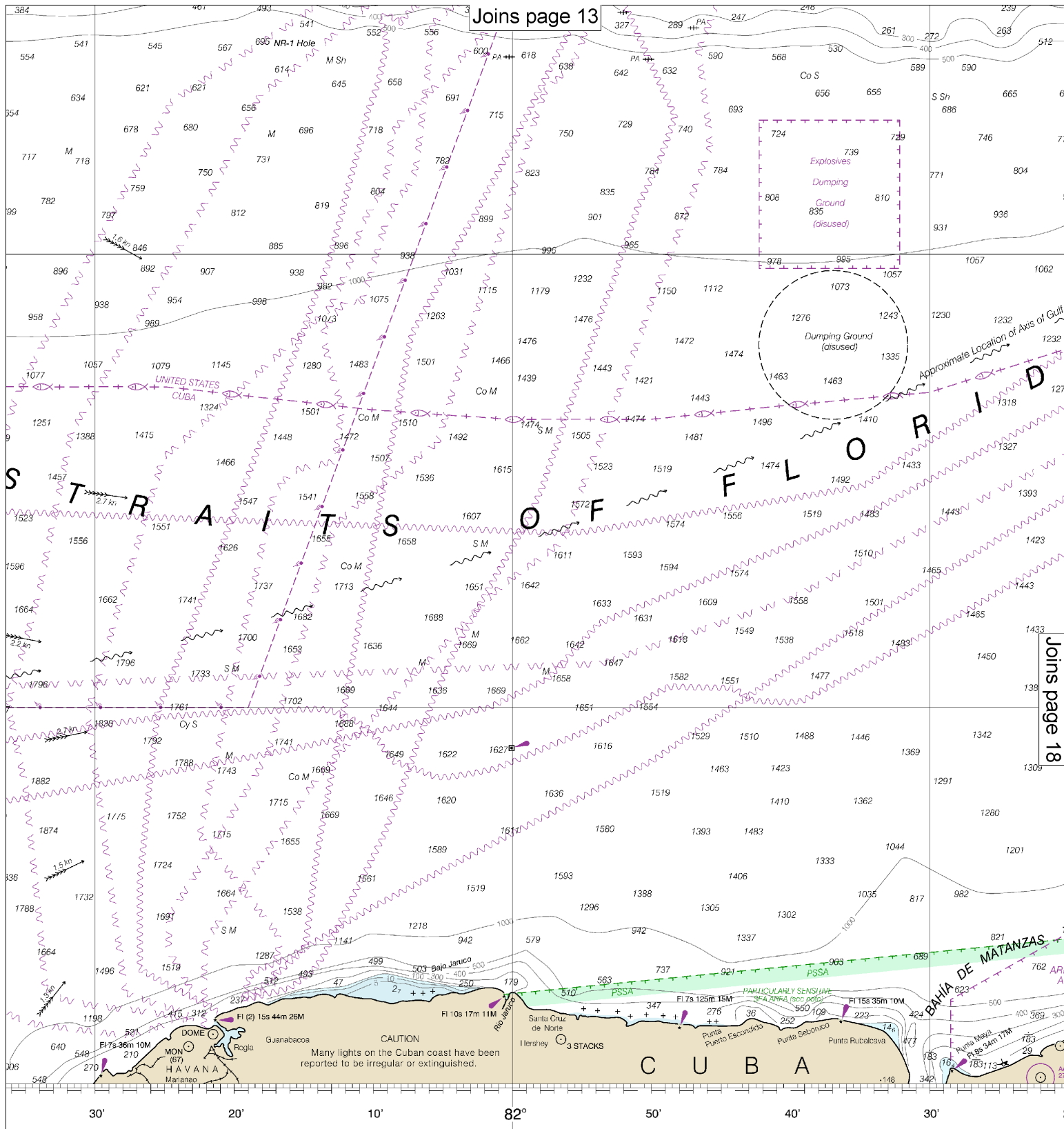










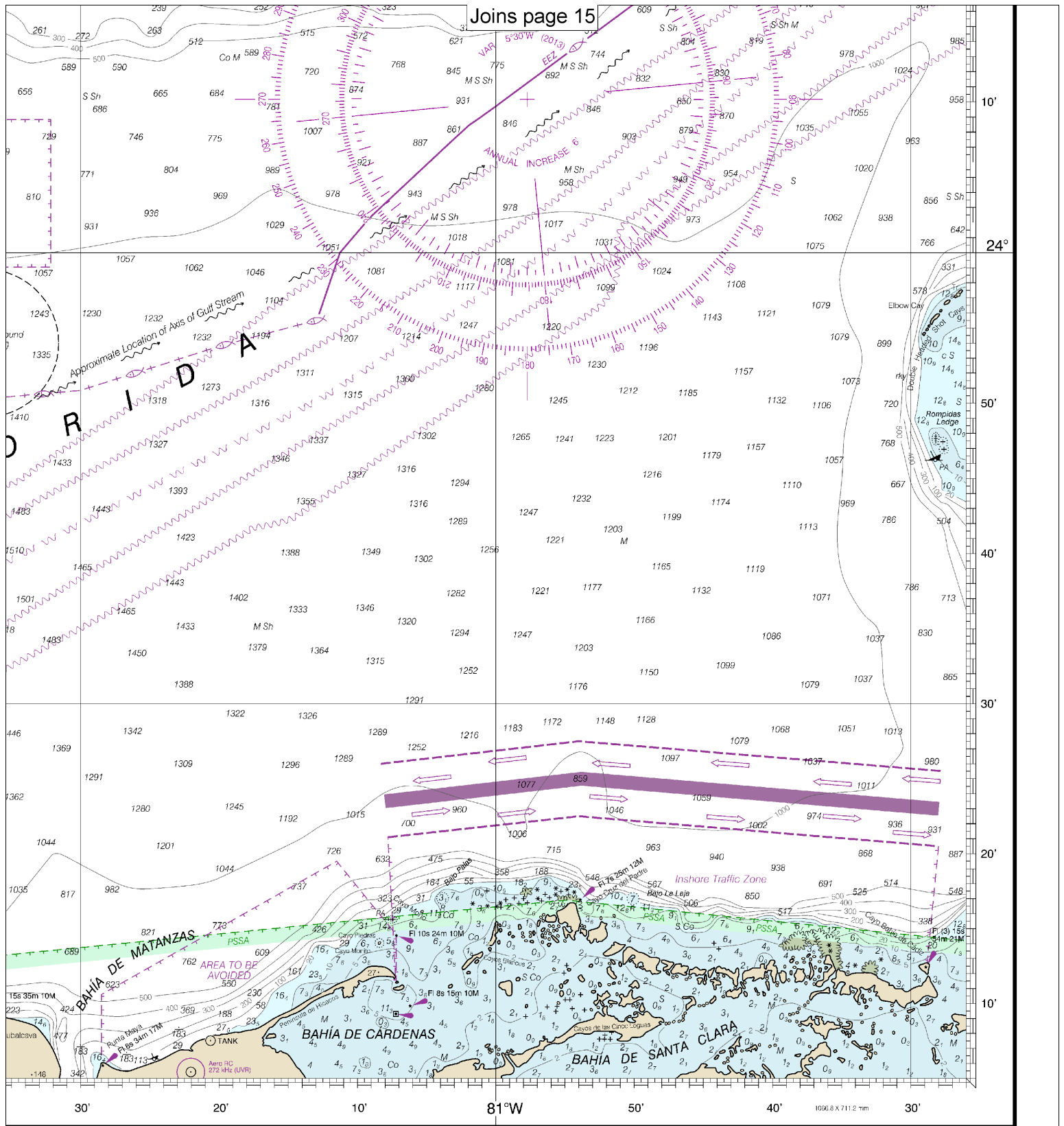


IN METERS

Published at Washington, D.C.  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SERVICE  
COAST SURVEY

FATHOMS	
FEET	
METERS	





FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Havana to Tampa Bay  
DEPTHS IN METERS - SCALE 1:470,940

INT 4148



## VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

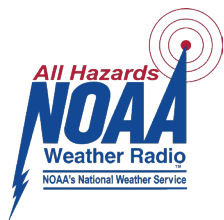
**Channel 16** – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

**Channels 68, 69, 71, 72 and 78A** – Recreational boat channels.

**Getting and Giving Help** — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



**NOAA Weather Radio All Hazards (NWR)** is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

## Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

**HAVE ALL PERSONS PUT ON LIFE JACKETS!**

## Quick References

Nautical chart related products and information	—	<a href="http://www.nauticalcharts.noaa.gov">http://www.nauticalcharts.noaa.gov</a>
Interactive chart catalog	—	<a href="http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml">http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml</a>
Report a chart discrepancy	—	<a href="http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx">http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx</a>
Chart and chart related inquiries and comments	—	<a href="http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs">http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs</a>
Chart updates (LNM and NM corrections)	—	<a href="http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html">http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html</a>
Coast Pilot online	—	<a href="http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm">http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm</a>
Tides and Currents	—	<a href="http://tidesandcurrents.noaa.gov">http://tidesandcurrents.noaa.gov</a>
Marine Forecasts	—	<a href="http://www.nws.noaa.gov/om/marine/home.htm">http://www.nws.noaa.gov/om/marine/home.htm</a>
National Data Buoy Center	—	<a href="http://www.ndbc.noaa.gov/">http://www.ndbc.noaa.gov/</a>
NowCoast web portal for coastal conditions	—	<a href="http://www.nowcoast.noaa.gov/">http://www.nowcoast.noaa.gov/</a>
National Weather Service	—	<a href="http://www.weather.gov/">http://www.weather.gov/</a>
National Hurricane Center	—	<a href="http://www.nhc.noaa.gov/">http://www.nhc.noaa.gov/</a>
Pacific Tsunami Warning Center	—	<a href="http://ptwc.weather.gov/">http://ptwc.weather.gov/</a>
Contact Us	—	<a href="http://www.nauticalcharts.noaa.gov/staff/contact.htm">http://www.nauticalcharts.noaa.gov/staff/contact.htm</a>



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